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Light Source	Emit Wave	Wavelength Region
3M Deluxe Transparency Maker Light Source	400 - 1200	E,F,G,H,I,J,K
558nm LED arrays	500 - 600	F,G
569nm LED arrays	550 - 600	G
590nm LED arrays	550 - 650	G,H
602nm LED arrays	570 - 700	H
615nm LED arrays	600 - 650	H
637nm LED arrays	600 - 700	H,I
644nm LED arrays	600 - 700	H,I
Bluepoint	300 - 600, 340 - 1150	C,D,E,F,G
Dental 3M-ESPE Elpar Trilight	400-600	D,E
Dental 3M-ESPE Freeflight LED	430-515	E
Dental 3M LED Prototype	450-520	D,E,F
Dental Akeda LUX-O-MAX LED	420 - 550	D,E,F
Dental Apollo 3EE Arc	440 - 520	E
Dental Apollo E LED	420 - 550	E,F
Dental Blue Light	400 - 500	D,E
Dental LaserMed Accucure 3000 Laser	480 - 510	E
Dental Nova LED.xls	450-550	E,F
Dental Yellow Light	370 - 800, 950 - 1100	E,F,G,H,I,J,K
Flood Lamp	350 - 1200	D,E,F,G,H,I,J,K
Fusion D Bulb	300 - 450, 500 - 600	B,C,D,F,G
Fusion H Bulb	350 - 450, 550 - 600	A,B,C,D,G
Fusion V Bulb	400 - 450, 550 - 600	D,G
General Electric Blacklight (black)	350 - 400	C
General Electric Blacklight (white)	350, 400, 435, 545	C
General Electric Cool Light	400 - 700, 950	F,G,H
General Electric Daylight	390 - 700	D,E,F,G,H
General Electric Germicidal	253	A
Gro & Sho Marx Light	400 - 700	D,E,F,G,H,I
Kodak Carousel 5200 Projector	450 - 700, 950 - 1100	E,F,G,H,I,J,K
Kodak Carousel 5600 Projector	450 - 750, 950 - 1100	E,F,G,H,I,J,K
Lesco Light (with new filter)	300 - 650	B,C,D,E,F,G,H
Lesco Light (with old filter)	295 - 500, 570 - 900	B,C,D,E,G
NIS Black Light Blue	300 - 400	B,C
PDSC 2520 200W Hg Light	300 - 450, 550 - 600	B,C,D,G
PDSC 930 200W Hg Light	300 - 600	B,C,D,E,F,G
Philips DDCK 1 Bulb	400 - 700, 950	D,E,F,G,H,K

Fig. 1

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Fig. 2

202240-06347007

Indicator	Name	Chemical Name	Color	Wavelength (nm)	Excitation (nm)	Emission (nm)	Refractive Index
1	6-methyl-2,4-bis(hydroxymethyl)-5-thiazine	Acetonitrile	R	<350	AB	272	13
2	CD 1010 (bis(hydroxymethyl)-5-thiazine)	Acetonitrile	C	<350	AB	300	80
3	CD 1011 (bis(hydroxymethyl)-5-thiazine)	Acetonitrile	C	<350	AB	300	100
4	CD 1012 (bis(hydroxymethyl)-5-thiazine)	Acetonitrile	C	<350	A	250	150
5	CyF (benzene) PFS	Acetonitrile	C	<350	AB, C, D, E, F	240	258
6	CyF (benzene) SFS-6	Acetonitrile	C	<350	AB, C, D, E	244	184
7	CyF (H2O) SFS	Acetonitrile	C	<350	AB, C, D, E, F	324	13
8	CyF (MeOH) PFS	Acetonitrile	C	<350	AB	244	231
9	CyF (MeOH) SFS-6	Acetonitrile	C	<350	AB	244	188
10	CyF (MeOH) SFS-6	Acetonitrile	C	<350	AB, C, D, E, F, G	220	400
11	CyF (benzene) SFS-6	Acetonitrile	C	<350	AB, C, D, E, F, G	334	255
12	CyF (benzene) PFS	Acetonitrile	C	<350	AB, C, D, E	242	257
13	CyF (benzene) SFS-6	Acetonitrile	C	<350	AB, C, D, E	242	278
14	CyF (benzene) SFS-6	Acetonitrile	C	<350	AB, C, D	242	254
15	CyF (benzene) SFS-6	Acetonitrile	C	<350	AB, C, D	242	205
16	Dioxane 42S	Acetonitrile	R	<400	AB, C	380	6
17	liposure 1300	Acetonitrile	R	<400	AB, C	320	141
18	liposure 1700	Acetonitrile	R	<430	AB, C	350	13
19	liposure 184	Acetonitrile	R	<370	AB	325	35
20	liposure 251	Acetonitrile	C	<350	AB, C, D, E	388	2
21	liposure 2503	Acetonitrile	R	<350	A	272	481
22	liposure 2503	Acetonitrile	R	<350	AB, C	320	455
23	liposure 251	Acetonitrile	R	<370	AB, C	342	8
24	liposure 251	Acetonitrile	R	<350	AB, C, D, E	355	19
25	liposure 251	Acetonitrile	R	<350	AB, C, D	370	17
26	liposure 251	Acetonitrile	R	<350	AB	304	482
27	liposure 251	Acetonitrile	R	<350	AB, C	342	8
28	liposure 251	Acetonitrile	C	<350	AB	290	55
29	liposure 251	Acetonitrile	C	<350	AB	300	183
30	liposure 251	Acetonitrile	R	<350	AB, C, D, E	350	35
31	liposure 251	Acetonitrile	R	<350	AB, C	352	280
32	liposure 251	Acetonitrile	R	<350	AB	294	640
33	liposure 251	Acetonitrile	CR	<350	EF	540	131
34	liposure 251	Acetonitrile	CR	<350	DEF	520	328
35	liposure 251	Acetonitrile	CR	<350	F	554	2511
36	liposure 251	Acetonitrile	CR	<350	FGHJ	650	3772
37	liposure 251	Acetonitrile	CR	<350	GHJK	604	417
38	liposure 251	Acetonitrile	CR	<350	BC	255	255
39	liposure 251	Acetonitrile	CR	<350	DE	454	1439
40	liposure 251	Acetonitrile	CR	<350	DE	458	1515
41	liposure 251	Acetonitrile	CR	<350	GHJ	630	1346

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Fig. 2A

Curing Resource Center

Integrated Solutions to
Substrate's Curing Needs

Waves By Name

Wavelength Region: Visible

UV Stabilizer

Name	Substrates Used Also: Wavelength (nm)	Wavelength Region	Lambda max (nm)	Ext Coef (1/W)	Real Ext (Actual cm)
UV 25	Acetate	<300	A,B,C	208	6/5
UV 25	Acetate	<300	A,B,C	292	384
UV 25	Acetate	<300	A	204	221
UV 25	Acetate	<270	A	204	220
UV 25	Acetate	<300	A,B,C	336	470
UV 25	Acetate	<400	A,B,C	340	190
UV 25	Acetate	<300	A	276	16.7
UV 25	Acetate	<270	A	208	36
UV 25	Acetate	<400	A,B,C	340	253
UV 25	Acetate	<200	A	208	43
UV 25	Acetate	<400	A,B,C	340	272
UV 25	Acetate	300	A,B,C	340	317
UV 25	Acetate	<400	A,B,C	286	330
UV 25	Acetate	<260	A	206	280

Notes: (If not indicated, new additional Substrates, Photochemicals or Light Sources)

UV 25

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UV 25

UV 25

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Substrate Tested	Color of Substrate	Thickness	Transmission Wavelength (nm)	Wavelength Region
3M CM500 Multilayer Film			300 - 500, 620 - 1020	B,C,D,E,H,I,J,K
3M CM580 Multilayer Film			310 - 575, 700 - 1140	B,C,D,E,F,G,H,I,K
3M IR Film			310 - 910	B,C,D,E,F,G,H,I,J,K
3M Microflex 8025-1115 80-6104-6609-8	orange, Cu traces	2-2.8 mil	> 465	F,G,H,I,J,K
ABS (Sample 1)	cream, opaque	0.13	> 400	E,F,G,H,I,J,K
ABS (sample 2)	cream, opaque	0.122	> 400	F,G,H,I,J,K
Acrylic	colorless, clear	0.111	> 370	D,E,F,G,H,I,J,K
Al CD disk (40nm)	reflected mirror	40 nm	> 300	B,C,D,E,F,G,H,I,J,K
Al CD disk (45nm)	reflected mirror	45 nm	> 300	B,C,D,E,F,G,H,I,J,K
Al CD disk (50nm)	reflected mirror	50 nm	> 300	B,C,D,E,F,G,H,I,J,K
Al on BET	reflected mirror	3 mil	> 320	B,C,D,E,F,G,H,I,J,K
Alumina	opaque white	0.034	> 330	C,D,E,F,G,H,I,J,K
Astar Adhesive	colorless		> 390	D,E,F,G,H,I,J,K
BT Epoxy	opaque brown	0.083	> 520	G,H,I,J,K
Canvas	natural	32 mil	> 400	D,E,F,G,H,I,J,K
DGEF Film			> 380	C,D,E,F,G,H,I,J,K
Diamond Grade Sheeting	reflected mirror	22 mil	> 400	D,E,F,G,H,I,J,K
FR4 with green solder mask	green	0.062	> 400	E,F,I,J,K
GFRP precision punch	light yellowish-green, translucent	0.135	> 360	D,E,F,G,H,I,J,K
GFRP (FR4)	light yellowish-green, translucent	0.067	> 360	D,E,F,G,H,I,J,K
Glass slide	clear, colorless	0.222	> 310	C,D,E,F,G,H,I,J,K
Helar ethylene-chlorotrifluoroethylene ECTFE film	hazy colorless (off-white)	19 mil	230 - 275, > 280	A,B,C,D,E,F,G,H,I,J,K
HDPE	white	0.127	> 280	B,C,D,E,F,G,H,I,J,K
Kapton	orange, transparent	0.8 mil	> 435	E,F,G,H,I,J,K
Kynar polyvinylidene fluoride PVDF film	hazy colorless	15 mil	> 200	A,B,C,D,E,F,G,H,I,J,K
Mirror Multi-layer film	reflected mirror	2 mil	> 200	A,B,C,D,K
Multi-layer film	multi color	2 mil	> 200	B,C,D,E,H,I,J,K
One layer Security System card	opaque white	21 mil	> 400	D,E,F,G,H,I,J,K
PC	opaque white	15 mil	415 - 530, > 600	E,H,I,J,K
PC Hyzod FD-8200	colorless, clear	0.116	> 280	C,D,E,F,G,H,I,J,K
PC Lexan 9034	colorless, clear	0.119	> 390	D,E,F,G,H,I,J,K
PCB w/ green solder mask (spl 1)	green, no traces, board only	0.033	400 - 800, > 680	E,F,I,J,K
PCB w/ green solder mask (spl 2)	green	3.066	400 - 510, > 680	E,F,I,J,K
PCB w/ green solder mask (spl 3)	green	0.068	400 - 500, > 680	E,F,I,J,K
PCB w/ green solder mask (spl 4)	green, ground plane stripes 1/4" across	0.068	400 - 500, > 680	E,F,G,I,K
PCB w/ green solder mask (spl 5)	green (yellowish tone)	3.063	> 450	E,F,G,I,K
PCB w/ green solder mask (spl 8)	green (bluish tone)	0.068	400 - 500, > 670	E,F,I,J,K
PETG	opaque white	22 mil	> 400	D,E,F,G,H,I,J,K
Polymide	opaque dark brown	0.074	> 320	G,H,I,J,K
Polypropylene	translucent white	0.128	> 280	C,D,E,F,G,H,I,J,K
Teflon	opaque white	0.181	> 200	A,B,C,D,E,F,G,H,I,J,K
TPX poly(methyl methacrylate) PMP film	hazy colorless	11 mil	230 - 375, > 280	A,B,C,D,E,F,G,H,I,J,K
Two layer Security System Card	opaque white	13 mil	> 420	D,E,F,G,H,I,J,K
Udal polysulfone Thermatrix film	hazy colorless (off-white)	10 mil	> 310	C,D,E,F,G,H,I,J,K
UHMWPE	sl translucent white	0.14	> 280	C,D,E,F,G,H,I,J,K
Ultram 1000 polyetherimide sample 1	amber transparent	0.13	> 415	E,F,G,H,I,J,K
Ultram 1000 polyetherimide sample 2	amber, transparent	0.122	> 430	E,F,G,H,I,J,K
Ultram Tempalux Film	amber, transparent	9 mil	> 400	D,E,F,G,H,I,J,K
Ultram-filled Micro-Pac on Circuit Wtse	amber transparent	0.164	> 410	F,G,H,I,J,K
Ultrason E polyetherimide PES film	hazy amber	10 mil	> 300	C,D,E,F,G,H,I,J,K
UMPS	orange, transparent	3 mil	310 - 400, > 470	F,G,H,I,J,K
Victrix PEEK film polyetheretherimide	amber, hazy transparent	10 mil	> 390	D,E,F,G,H,I,J,K
Vinyl card	opaque white	30 mil	> 410	D,E,F,G,H,I,J,K
Vinyl film	clear	7.5 mil	> 380	D,E,F,G,H,I,J,K

Fig. 3

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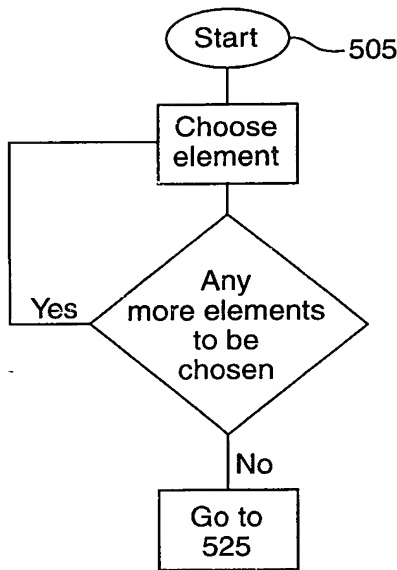


Fig. 4A

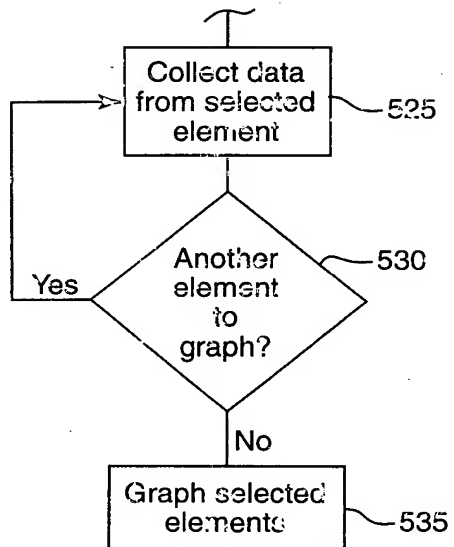


Fig. 4B

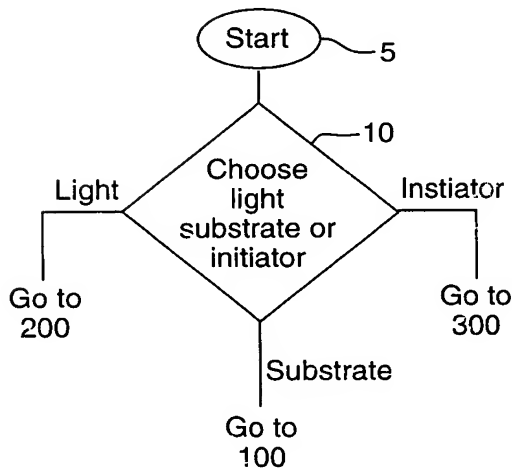


Fig. 4C

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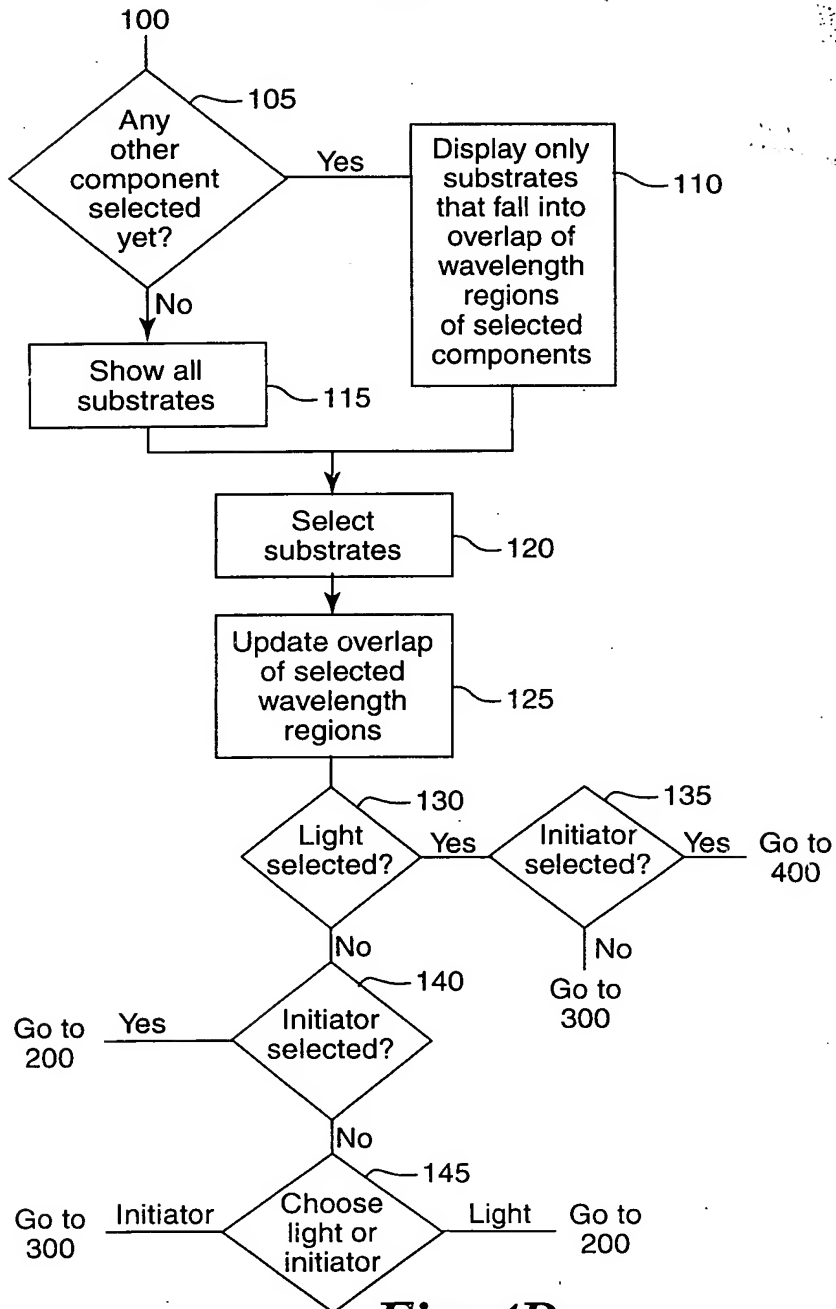


Fig. 4D

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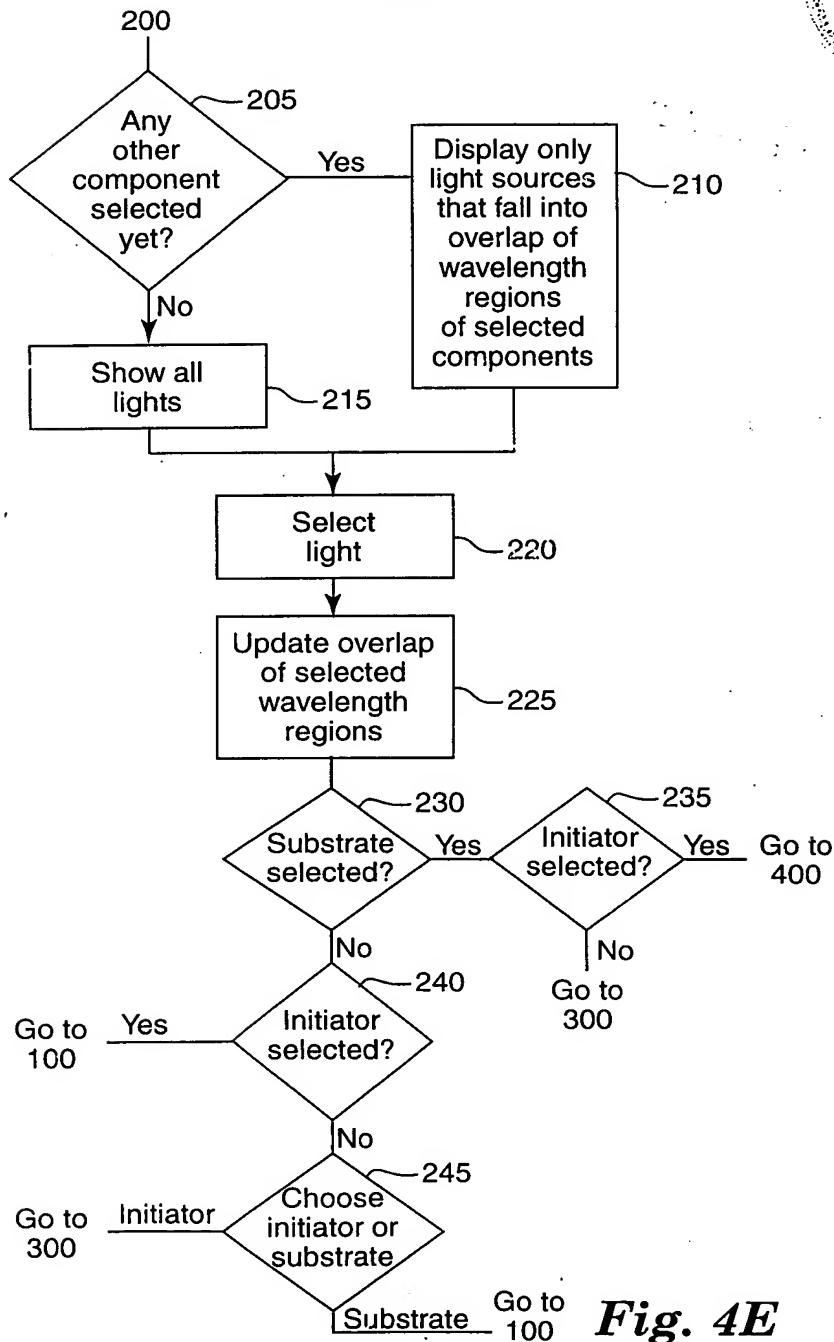


Fig. 4E

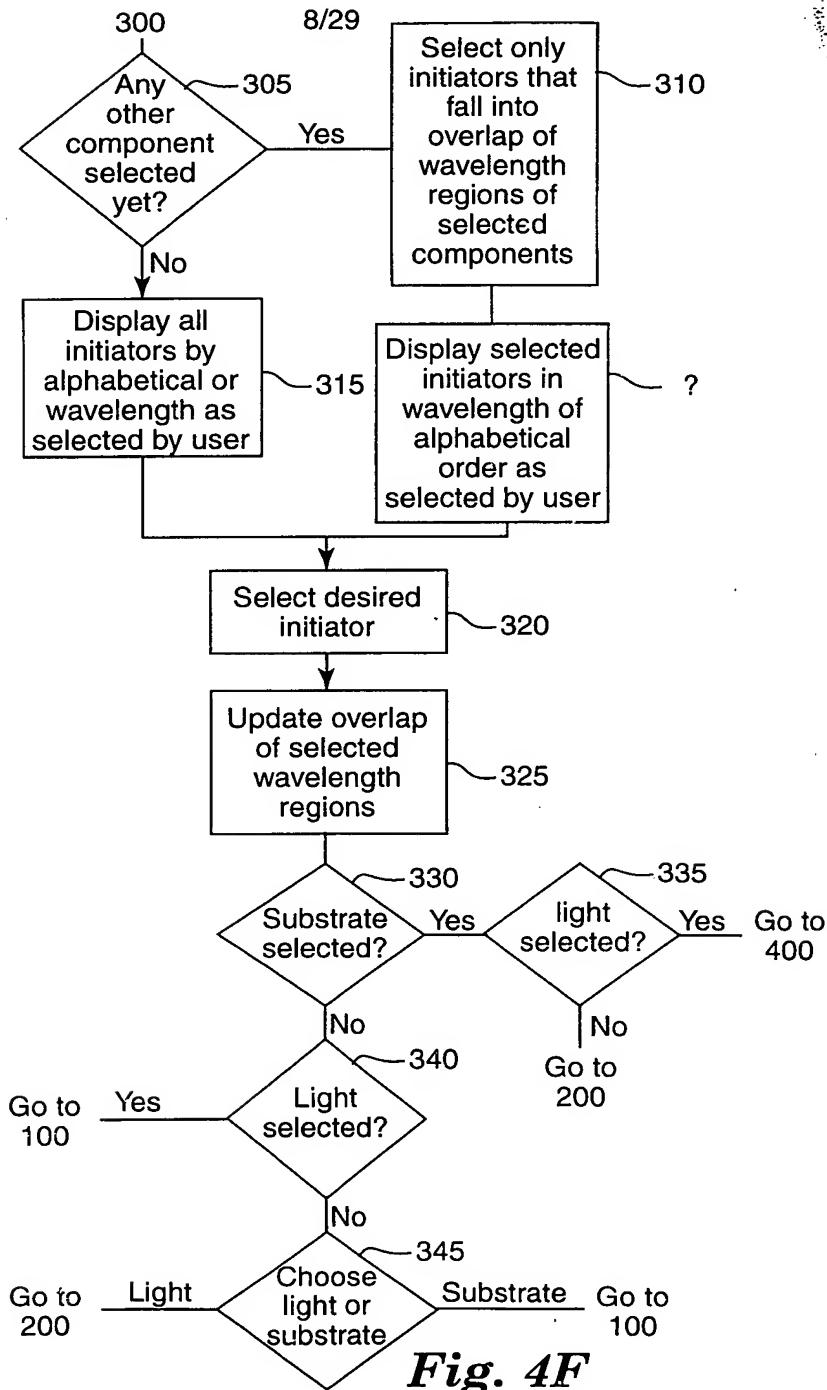


Fig. 4F

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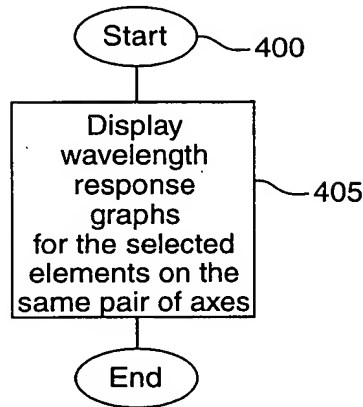


Fig. 4G

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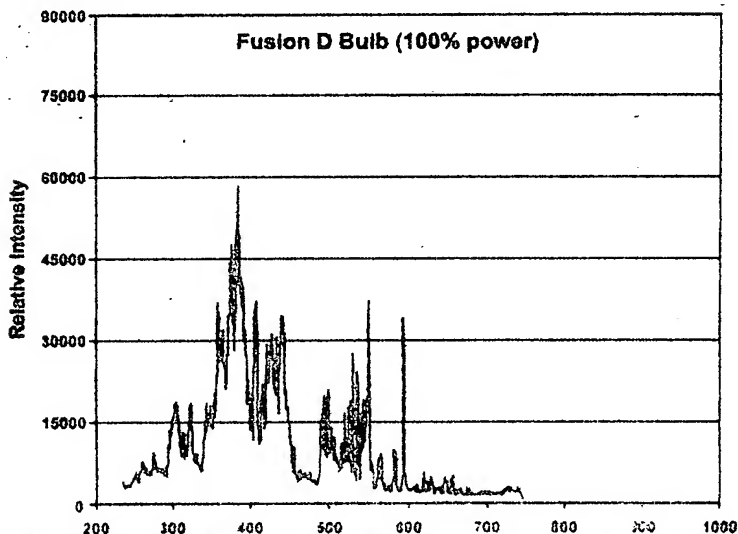
Light Source Profile

Light Sources: Fusion D Bulb
Emiss. 300 - 450, 500 - 600 **Picture of Light Source**
Wavelength (nm)
Wavelength B, C, D, F, G
Region:
Intensity
Notes:



Fusion D 100.xls

Emiss Spectrum:



Emiss Data (Enter data from frequencies 200 - 1000 only. Enter data separated by a comma and one space (i.e. 12.3, 32.1):

4371, 3681, 4423, 4041, 4026, 4369, 4010, 4228, 3519, 4111, 3627, 4240, 3962, 3797, 3989,
 4447, 3831, 3689, 3860, 3839, 4266, 3601, 3955, 4401, 3722, 3732, 3956, 4012, 3506, 3899,
 4133, 4359, 4452, 3584, 4151, 3963, 3765, 3692, 3927, 4447, 3759, 3826, 4215, 3946, 3853,
 4117, 4283, 3644, 3793, 3609, 3810, 4253, 3981, 4295, 3881, 3604, 3679, 3791, 3519, 3888,
 4435, 3511, 4463, 3632, 4161, 3553, 4280, 3803, 3590, 3769, 4096, 4095, 3157, 3210, 3202,
 3285, 3130, 3130, 2986, 3018, 3082, 3306, 3263, 3302, 3106, 3109, 3042, 3115, 3082, 3266,
 3263, 3530, 3749, 4239, 4413, 4841, 4757, 4922, 4423, 4687, 4975, 5386, 5045, 5378, 5474,
 5935, 5550, 5610, 4778, 4176, 3786, 3906, 3883, 4203, 4462, 5436, 6021, 7066, 7135, 7701,
 7402, 7829, 7338, 7530, 6794, 6843, 6405, 6634, 6042, 6018, 5793, 6329, 5930, 5807, 5502,
 5727, 5461, 5688, 5247, 5570, 5405, 5567, 5386, 5781, 5637, 6314, 6370, 7090, 7391, 8362,
 8474, 9376, 8810, 9034, 9309, 8352, 7302, 7060, 6442, 6592, 5953, 6332, 6213, 6414, 6010,
 6346, 6202, 6452, 6059, 6397, 6143, 6287, 5829, 6186, 6000, 6133, 5463, 5397, 9360, 5941,
 5456, 5218, 5120, 5882, 6010, 6826, 6847, 7690, 8224, 9277, 9379, 10762, 10314, 11424, 12000,
 13370, 12474, 13928, 13594, 14824, 14734, 16098, 15146, 16235, 15923, 18144, 17212, 17789,

Fig. 5A

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17034, 18005, 17138, 17930, 16919, 17448, 15336, 15695, 13984, 13044, 11810, 11727, 10869, 10833, 8837, 9226, 9120, 10912, 12062, 13186, 11738, 12986, 12704, 12806, 10717, 9598, 8324, 9018, 9130, 9410, 8786, 10634, 10842, 11562, 12318, 15690, 15598, 17730, 17674, 18613, 16741, 17030, 14618, 13026, 10517, 10519, 9448, 8801, 7669, 8663, 8719, 8442, 7621, 9134, 9133, 8306, 7426, 7364, 7125, 6730, 6319, 6736, 5941, 6242, 5954, 6141, 6058, 6333, 6261, 7210, 7332, 8879, 9226, 11133, 11541, 12631, 12770, 14848, 14122, 13501, 14634, 18516, 16330, 15966, 14917, 16639, 15044, 15018, 14335, 14600, 15385, 17898, 15957, 15136, 13938, 15309, 14351, 16090, 15914, 17498, 18261, 19946, 17169, 19669, 20282, 22059, 24453, 29119, 29482, 36900, 35723, 34421, 29898, 31956, 29718, 28322, 26179, 29696, 27466, 30504, 26163, 26370, 28122, 31850, 26646, 27834, 25637, 24606, 21130, 23162, 22279, 23767, 22976, 27322, 27605, 27802, 27391, 34676, 34298, 38379, 38703, 44117, 42659, 46218, 43589, 47710, 43066, 40798, 33746, 32673, 28372, 28680, 28106, 31690, 30389, 36869, 40106, 47424, 48578, 35837, 54952, 58549, 50099, 49514, 44181, 46058, 40090, 41533, 38709, 39914, 37109, 38954, 36341, 40474, 35613, 33807, 30282, 32889, 29954, 31759, 28234, 29079, 24981, 23248, 18575, 18293, 19278, 22717, 19358, 20282, 18106, 16710, 13693, 14634, 15445, 16880, 15890, 17204, 14900, 13917, 11770, 14431, 21809, 27216, 25135, 33001, 35704, 37304, 34026, 34566, 29941, 26234, 18623, 14999, 11783, 11732, 10846, 11937, 11439, 14330, 15802, 17658, 20062, 21930, 20282, 20458, 16496, 15508, 14026, 14824, 16106, 21194, 21911, 28410, 29043, 28922, 25936, 26104, 22153, 22292, 22170, 25425, 22687, 26911, 26042, 26989, 26936, 29770, 31097, 30122, 26530, 25826, 21886, 21386, 20052, 26346, 26415, 26762, 26717, 30634, 24610, 24866, 21975, 19772, 16618, 23290, 26293, 28586, 28906, 30423, 29757, 34609, 31466, 34367, 32441, 34280, 29463, 33981, 31310, 30997, 25514, 23407, 20111, 20797, 17986, 18347, 17365, 17576, 19233, 15846, 14038, 13637, 11936, 12794, 10731, 9770, 7905, 6842, 5538, 6794, 9245, 10538, 10158, 10298, 7760, 6114, 5090, 5045, 4648, 4545, 4146, 4181, 4094, 4602, 4797, 5762, 5727, 6000, 5441, 5167, 4512, 4574, 4449, 4714, 4706, 5086, 4927, 5077, 5106, 5373, 5194, 5544, 5125, 5205, 4738, 4794, 4821, 5180, 4904, 5029, 4613, 4746, 5052, 5662, 5527, 5598, 4799, 4416, 3989, 4092, 3935, 4042, 3988, 4258, 4055, 4238, 4002, 3936, 3650, 3671, 3473, 3546, 3482, 3706, 3710, 3914, 3970, 4970, 5482, 7866, 10634, 12618, 12316, 14410, 15496, 16513, 15600, 14122, 9984, 12605, 16661, 19738, 18578, 16303, 10730, 8853, 8546, 14496, 17583, 20842, 18538, 14742, 10014, 9685, 9258, 10064, 9539, 11192, 11967, 13802, 12591, 11690, 9066, 8202, 8122, 9455, 10527, 11916, 10452, 9578, 7722, 7466, 7616, 8488, 7632, 7173, 5973, 5807, 6586, 7658, 7174, 7191, 6295, 6896, 8426, 10974, 10997, 11002, 8234, 7626, 10688, 15813, 16618, 15348, 9717, 8386, 9559, 11915, 11100, 9621, 7682, 7632, 9642, 14786, 17525, 18666, 13770, 9567, 5983, 5248, 7432, 17364, 23445, 27663, 21599, 14930, 8949, 6568, 4970, 4778, 4325, 4234, 6526, 15205, 20629, 24181, 18941, 13695, 8715, 6175, 4472, 6369, 11537, 16570, 16289, 13790, 9546, 10757, 12943, 18671, 18966, 18398, 13322, 11479, 12671, 17192, 17155, 17109, 14618, 17322, 24133, 36055, 37231, 32490, 18858, 11434, 7203, 6122, 5845, 6934, 7406, 7432, 5675, 4298, 3173, 2858, 2722, 2785, 2762, 2814, 2775, 2949, 3392, 5186, 6890, 8176, 7840, 8202, 7530, 6551, 4895, 4503, 5679, 8245, 8990, 8001, 5378, 4026, 3188, 2923, 2709, 3041, 3442, 3716, 3173, 2676, 2373, 2474, 2474, 2519, 2516, 2709, 2909, 3081, 2815, 2526, 2288, 2223, 2223, 2245, 2325, 2618, 3094, 4608, 7038, 9809, 9256, 8168, 7658, 3506, 3586, 7974, 5282, 3914, 3048, 2728, 2434, 2267, 2165, 2117, 2082, 2090, 2154, 2325, 2431, 2442, 2341, 2570, 4994, 14391, 25815, 33966, 26880, 18101, 9642, 6346, 4439, 3810, 3384, 3298, 2949, 2762, 2582, 2538, 2421, 2346, 2283, 2314, 2362, 2487, 2516, 2430, 2314, 2389, 2494, 2538, 2549, 2858, 2946, 2746, 2373, 2192, 2132, 2143, 2229, 2626, 3104, 3296, 2775, 2538, 2360, 2226, 2154, 2208, 2277, 2250, 2117, 2074, 2358, 2325, 3768, 5077, 5973, 4408, 3029, 2512, 2293, 2274, 2266, 2250, 2218, 2666, 3551, 4157, 3354, 2730, 2346, 2443, 2582, 2965, 3861, 4736, 3786, 3232, 3476, 4256, 4042, 3410, 2826, 2420, 2106, 1987, 1930, 1914, 2173, 2623, 2650, 2427, 2474, 2672, 2426, 2338, 2629, 2846, 2424, 2101, 2018, 2042, 1939, 1839, 1786, 1759, 1838, 2236, 3274, 4650, 4714, 4362, 3770, 3722, 3586, 3792, 3640, 3397, 2626, 2215, 2034, 1989, 2000, 2010, 1989, 1930, 1914, 1925, 2466, 4258, 5162, 4202, 2839, 2208, 1899, 1771, 1749, 1722, 1749, 1911, 2314, 2416, 2037, 1794, 1781, 1876, 1953, 1867, 1853, 2191, 2741, 2720, 2209, 2001, 1925, 1770, 1685, 1623, 1663, 1642, 1653, 1589, 1573, 1550, 1704, 1789, 1366, 2402, 2986, 2730, 2128, 1786, 1727, 2026, 2501, 2464, 2050, 1784, 1658, 1570, 1621, 1599, 1643, 1685, 1704, 1605, 1579, 1493, 1525, 1494, 1576, 1568, 1605, 1598, 1653, 1674, 1770,

Fig. 5B

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1727, 1698, 1672, 1725, 1754, 1834, 1863, 1994, 2074, 1930, 1717, 1666, 1674, 1885, 2082,
2154, 2026, 1890, 1834, 1823, 1754, 1706, 1616, 1691, 1773, 1794, 1821, 1994, 2069, 1973,
1751, 1672, 1599, 1722, 1898, 1936, 1825, 1834, 1759, 1685, 1599, 1642, 1662, 1781, 1823,
1768, 1706, 1824, 1856, 1909, 1882, 1826, 1813, 1839, 1820, 1914, 1985, 1909, 1751, 1678,
1674, 1882, 2042, 2069, 1962, 2042, 2298, 2423, 2538, 2424, 2256, 2199, 2421, 2698, 2901,
2794, 2691, 2722, 2922, 2565, 2261, 2239, 2559, 2672, 2751, 2626, 2389, 2250, 2394, 2453,
2365, 2152, 2026, 2143, 2330, 2282, 2175, 2069, 2000, 2104, 2421, 2735, 2880, 2708, 2536,
2209, 2042, 1985, 1884, 1818, 1738, 1661, 618

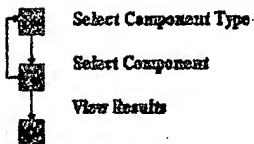
Maximum Frequency (Enter 1000 or smaller if the frequency range is less than 1000):
748

Fig. 5C

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Select a Substrate, Light Source, and/or Photo Initiator Type



This process allows you to select up to three components to view together. For each component, you must first select a component type. There are three types of components to select from (Substrate, Photo Initiator, or Light Source). After selecting the desired component type, you can then select a component of that type.

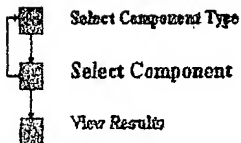
- Select the first component type from the drop-down list below and click the Next > button.

Select the first component type:

Substrate

Fig. 6A

Select a Substrate, Light Source, and/or Photo Initiator



- If you want to view more components, select a component of the selected type from the drop-down list below and click the Next > button.
- If you want to view the current component(s), select a component of the selected type from the drop-down list below and click the Finish button.
- If you want to select a different component type, click the < Back button.

Select a Substrate:

< Back Next > View Overlay

Fig. 6B

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Select a Substrate, Light Source, and/or Photo Initiator Type

- ☐ Select Component Type
 - Select the next component type from the drop-down list below and click the Next > button.
- ☐ Select Component
 - If you want to select a different component, click the < Back button.
- ☐ View Results

Select the second component type:

Component Type	Light
Component	BT Resin

< Back	Next >
--------	--------

Fig. 6C

Select a Substrate, Light Source, and/or Photo Initiator

- ☐ Select Component Type
 - If you want to view more components, select a component of the selected type from the drop-down list below and click the Next > button.
- ☐ Select Component
 - If you want to view the current component(s), select a component of the selected type from the drop-down list below and click the Finish button.
- ☐ View Results
 - If you want to select a different component type, click the < Back button.

Select a Photo Initiator:

Component Type	Substrate
Component	UV Epoxy

< Back	Next >	View Overlay
--------	--------	--------------

Fig. 6D

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Select a Substrate, Light Source, and/or Photo Initiator Type

☐ Select Component Type

☐ Select Component

☐ View Results

- Select the next component type from the drop-down list below and click the Next > button.
- If you want to select a different component, click the < Back button.

Select the third component type:

Component Type #1:	Substrate
Component #1:	BT Epoxy
Component Type #2:	Photo Initiator
Component #2:	Dispense Blue

Fig. 6E

Select a Substrate, Light Source, and/or Photo Initiator

☐ Select Component Type

☐ Select Component

☐ View Results

- If you want to view more components, select a component of the selected type from the drop-down list below and click the Next > button.
- If you want to view the current component(s), select a component of the selected type from the drop-down list below and click the Finish button.
- If you want to select a different component type, click the < Back button.

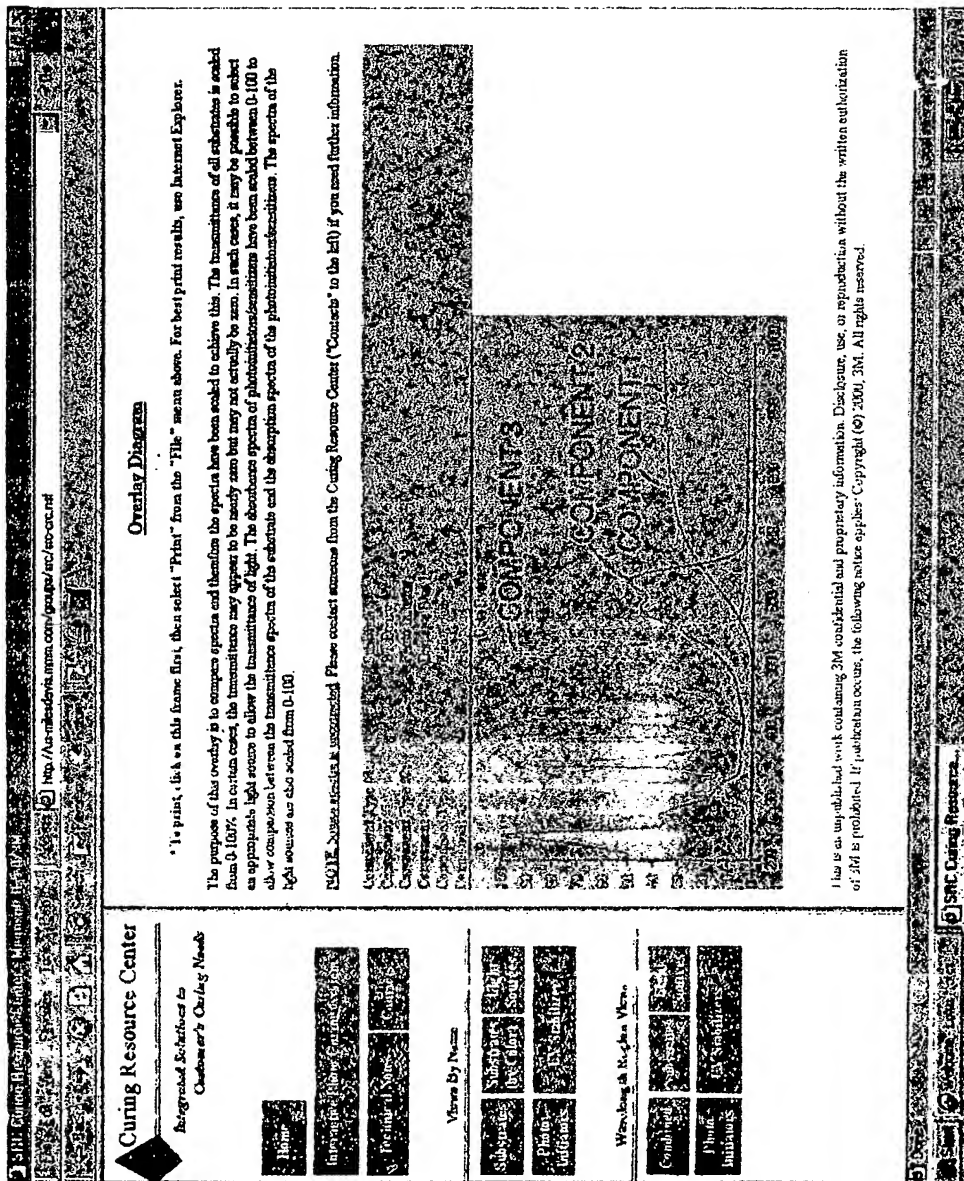
Select a Light Source:

Component Type #1:	Substrate
Component #1:	BT Epoxy
Component Type #2:	Photo Initiator
Component #2:	Dispense Blue

Fig. 6F

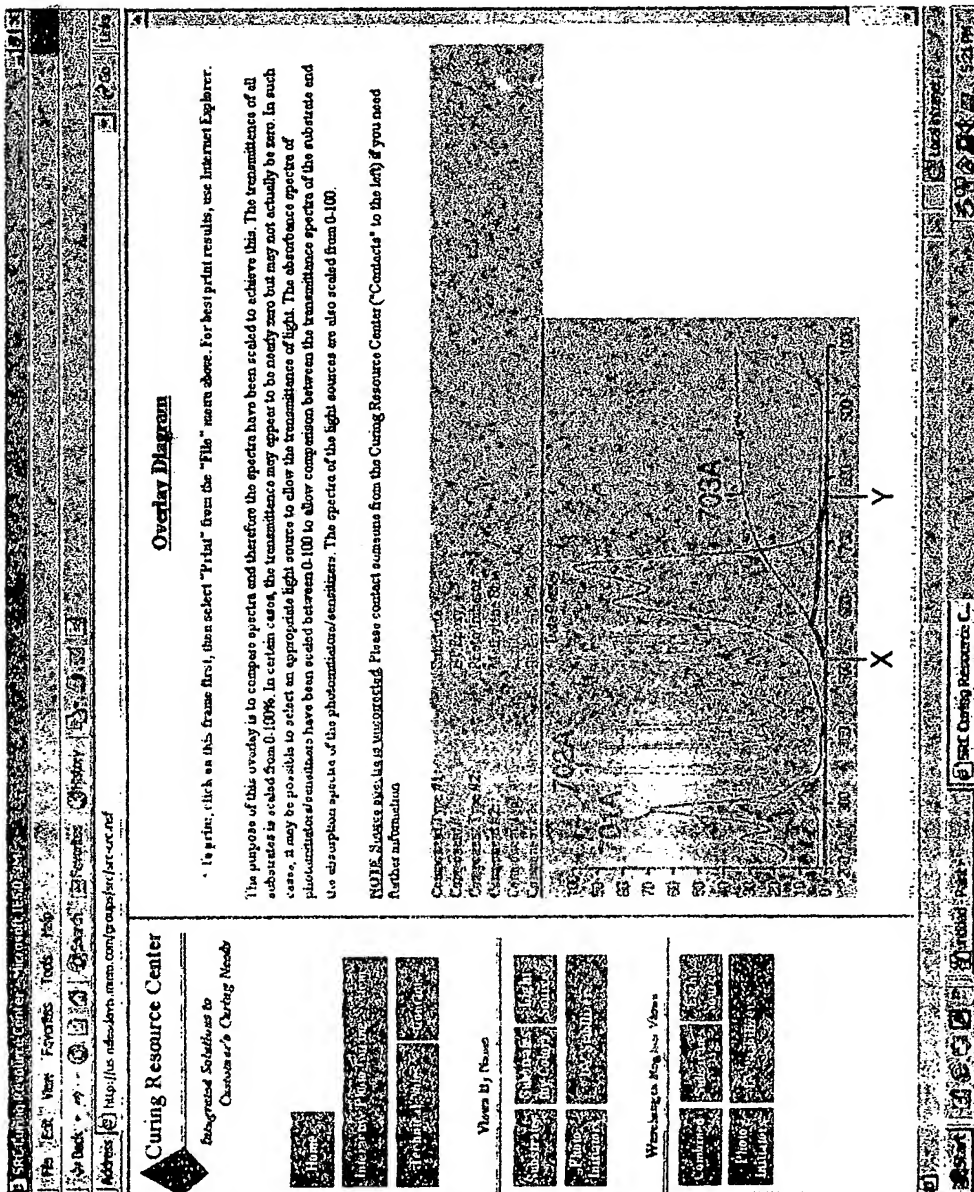
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Fig. 60



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Fig. 7A



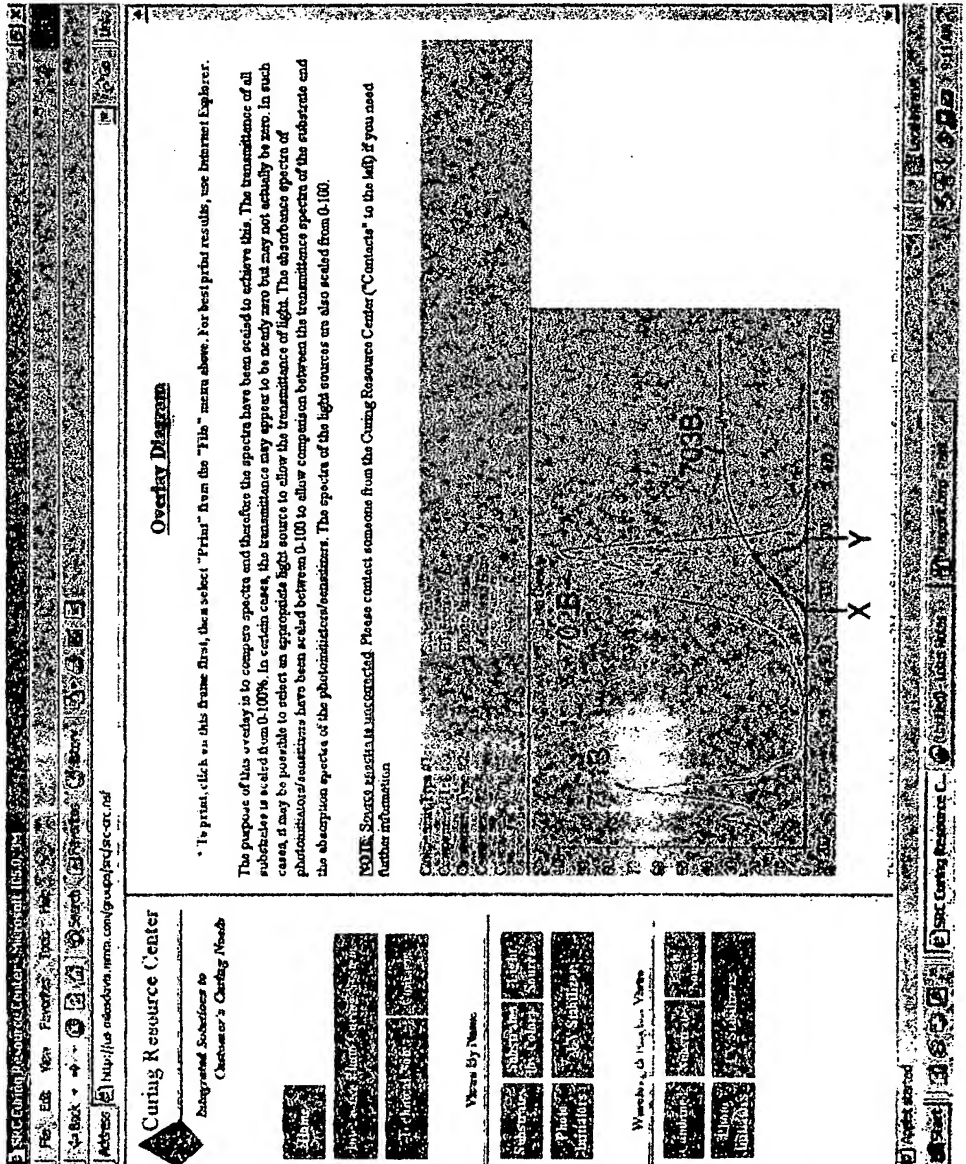
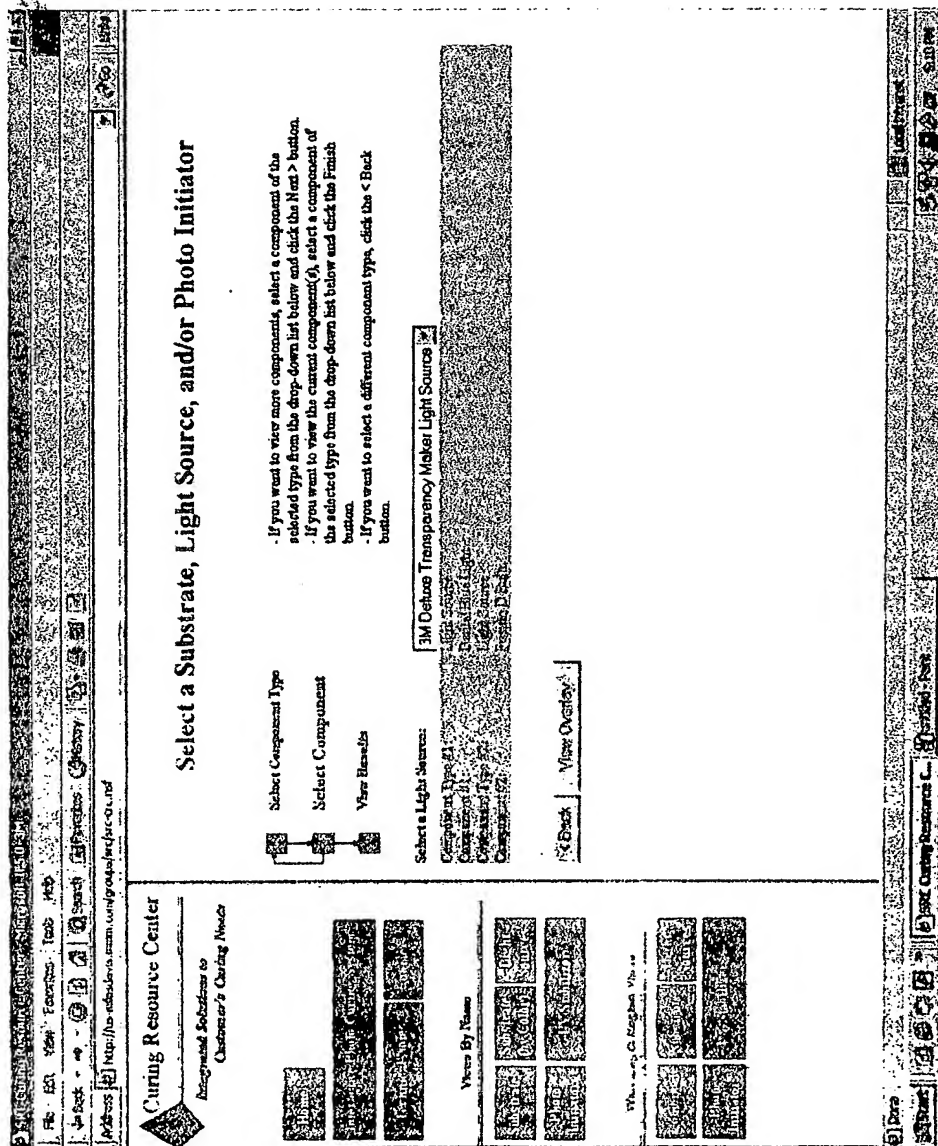


Fig. 7C

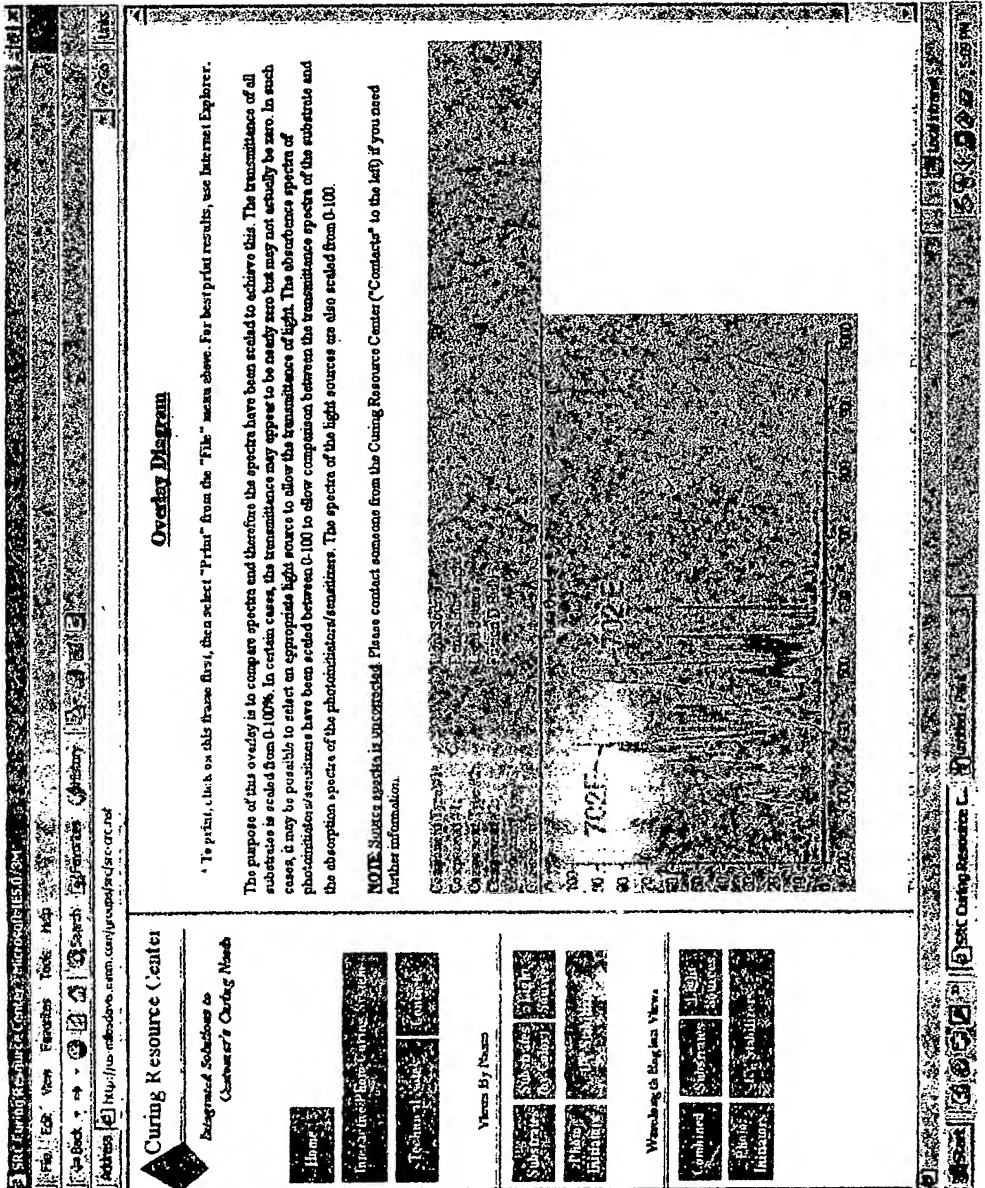


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Fig. 7D

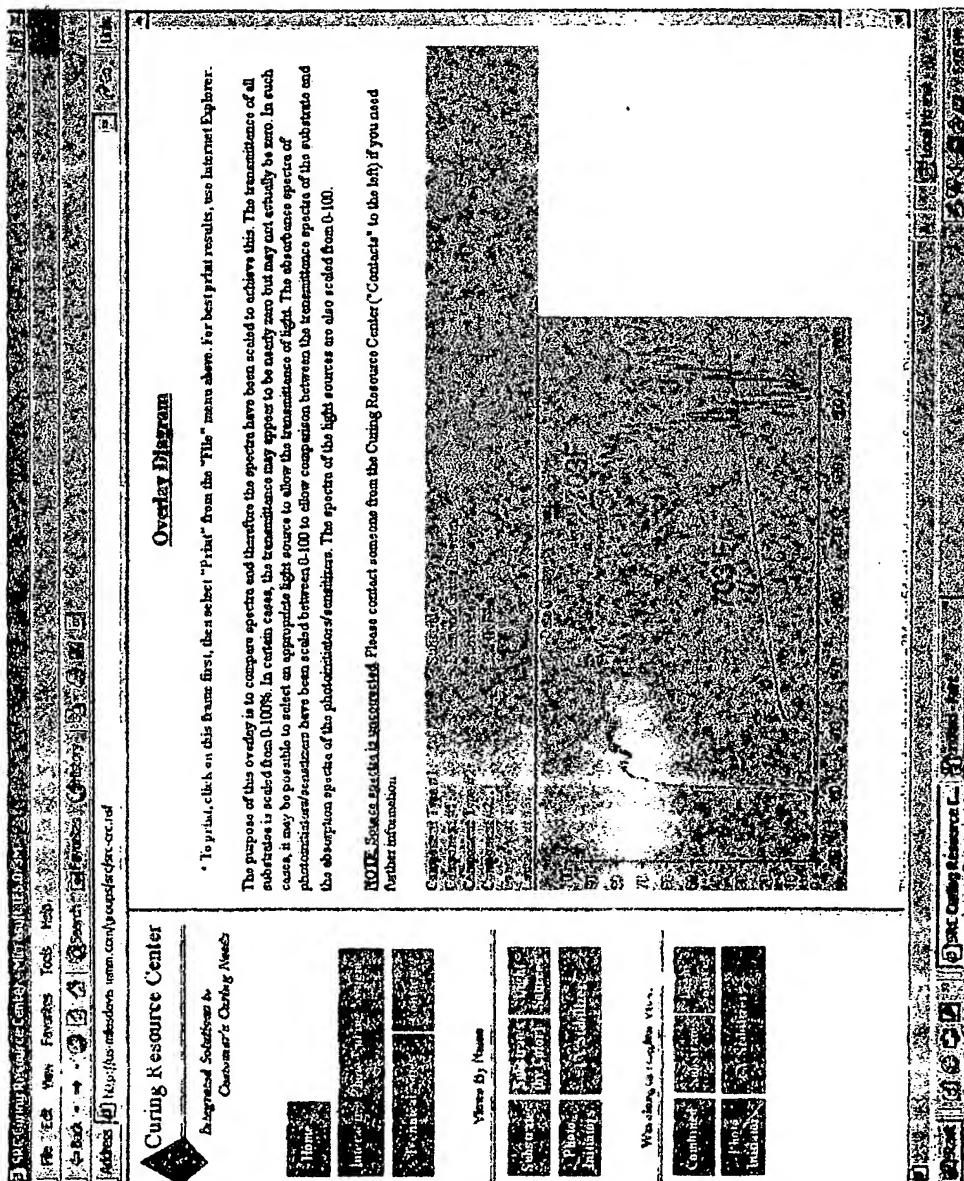


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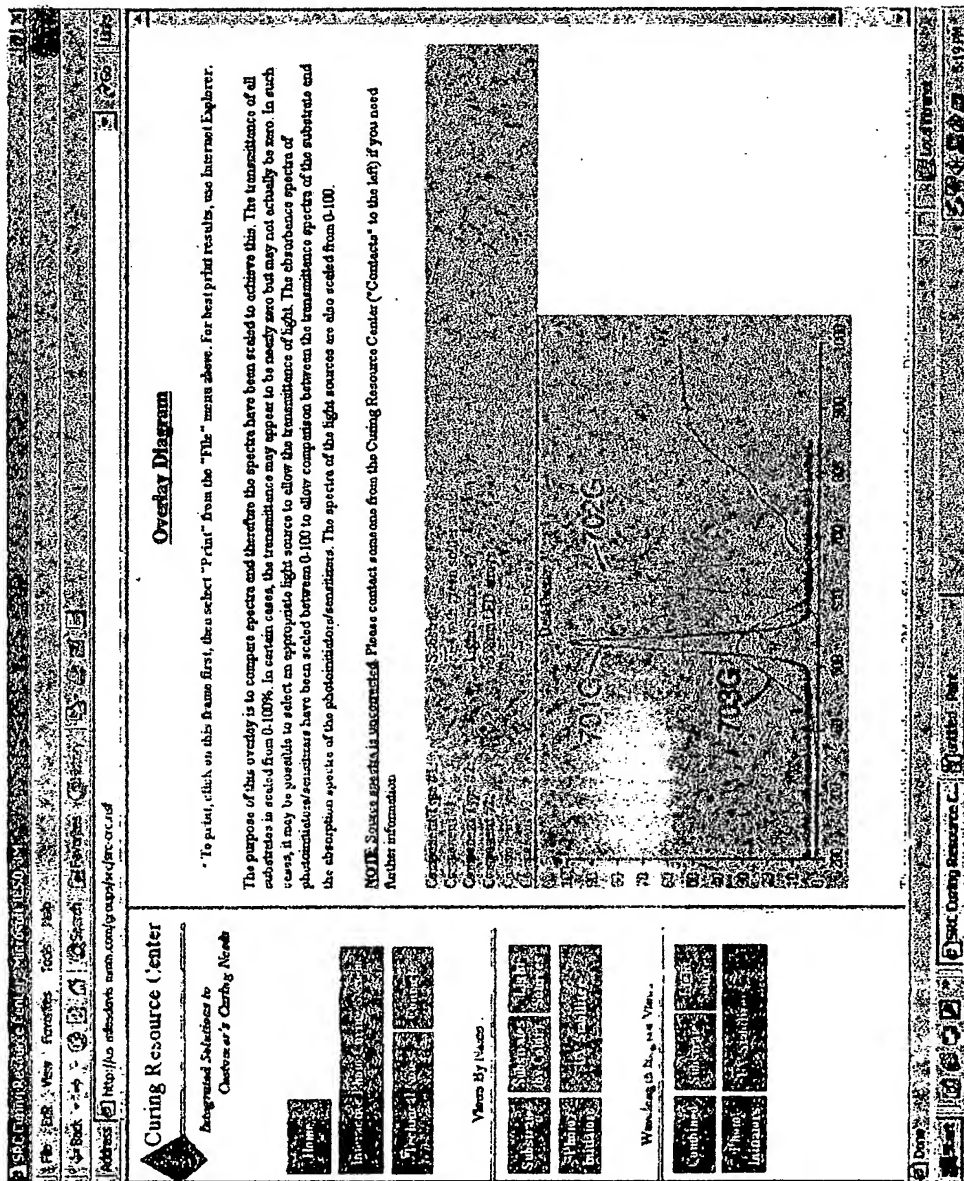
Fig. 7H



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Fig. 7G

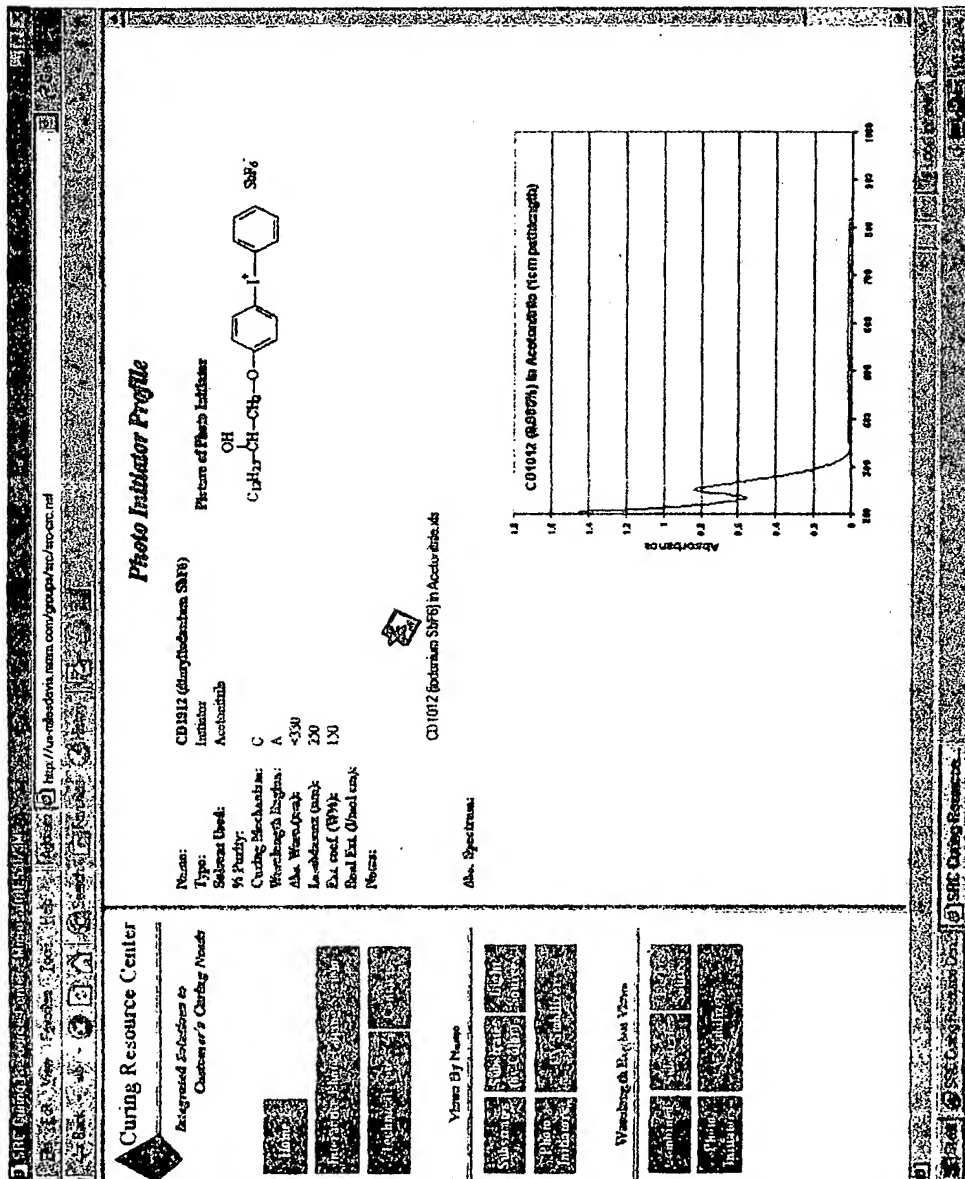


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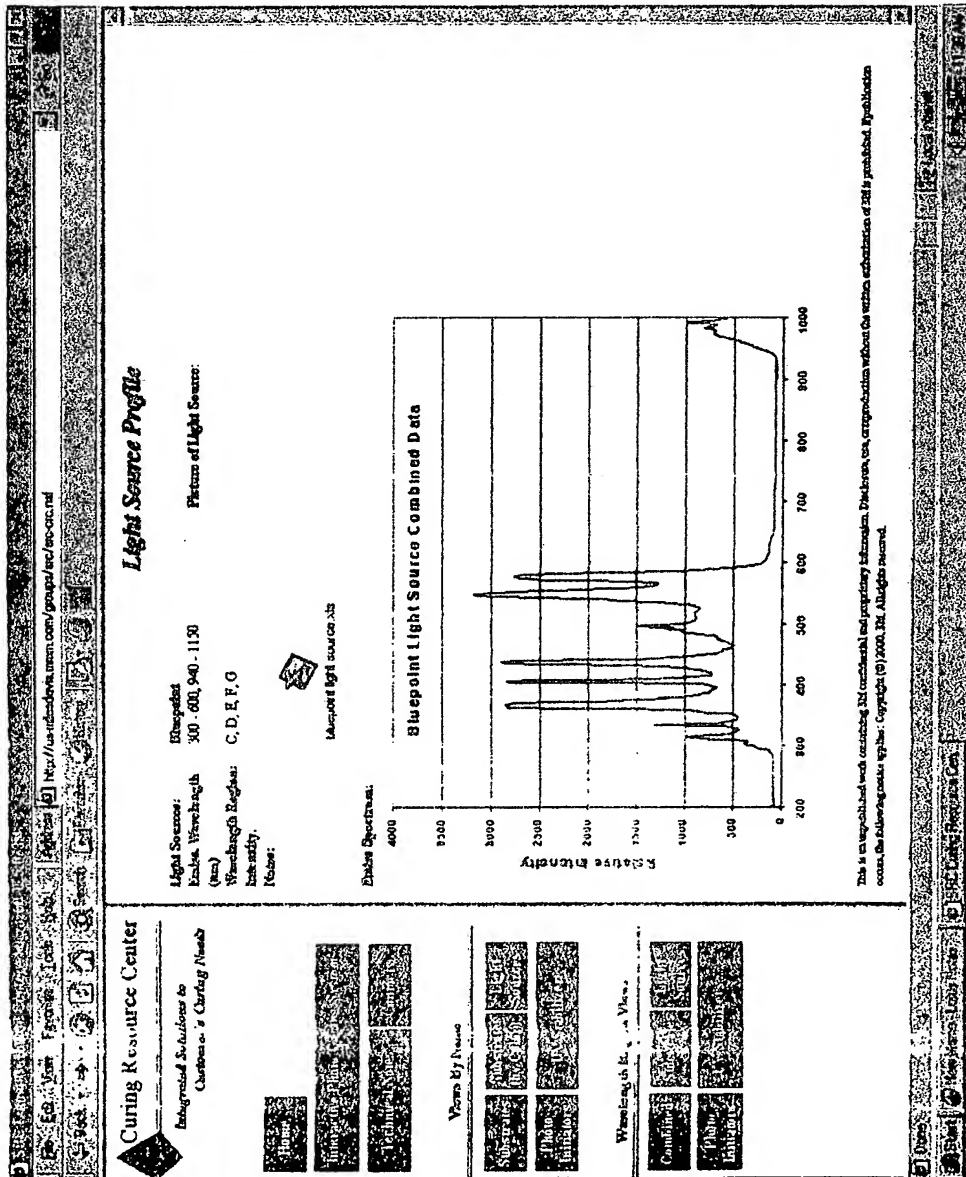
Fig. 7H



202240-0651001

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Fig. 71



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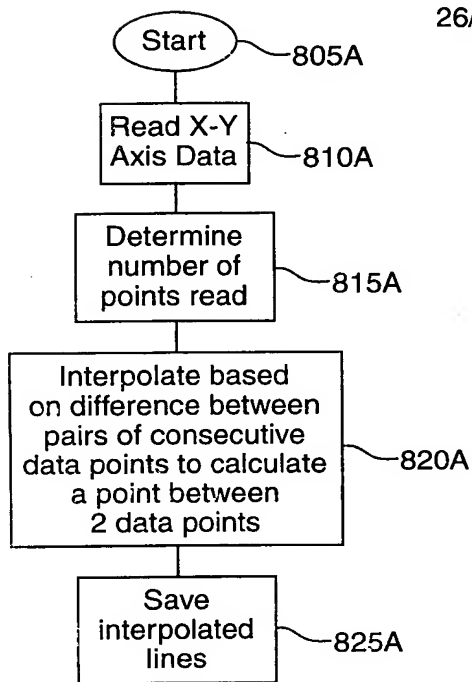


Fig. 8A

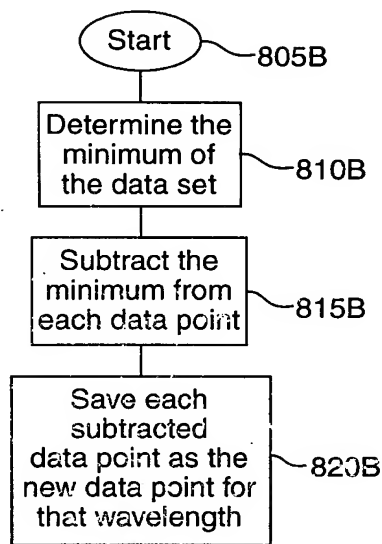


Fig. 8B

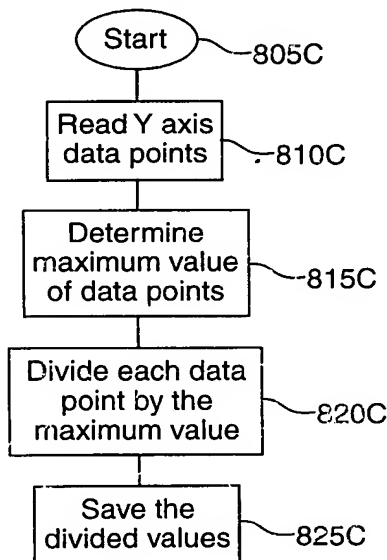


Fig. 8C

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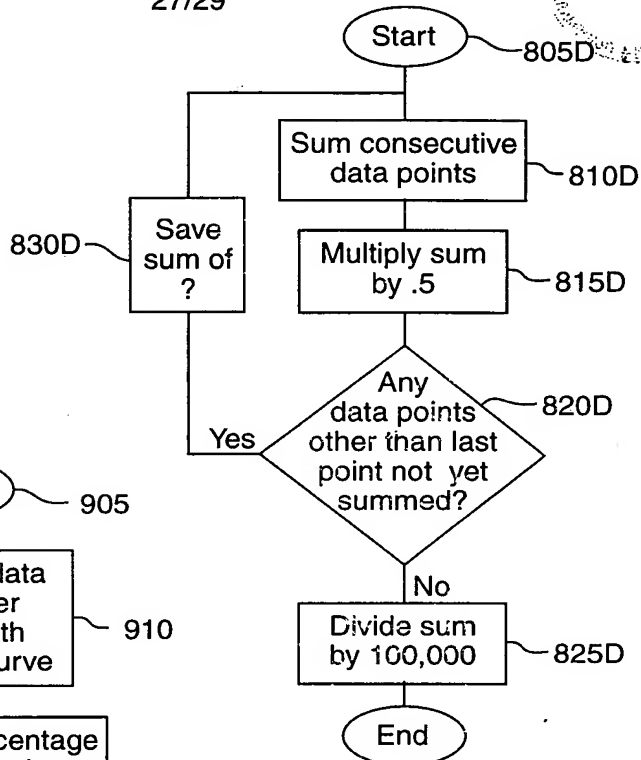


Fig. 8D

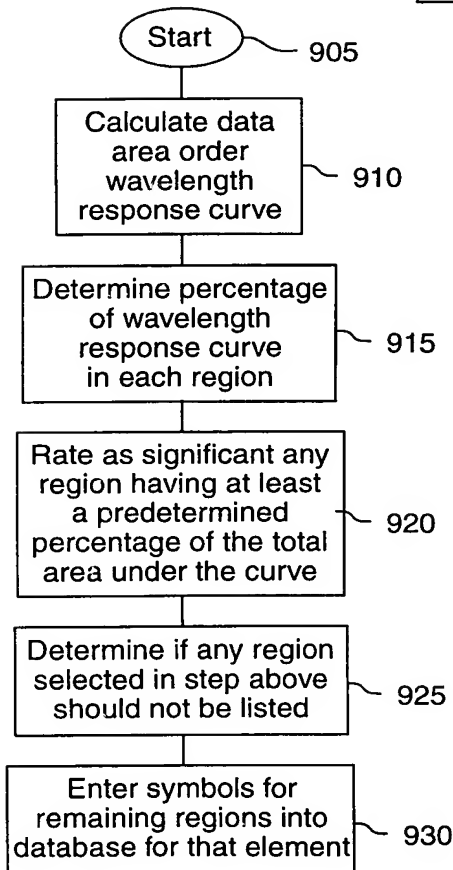


Fig. 9



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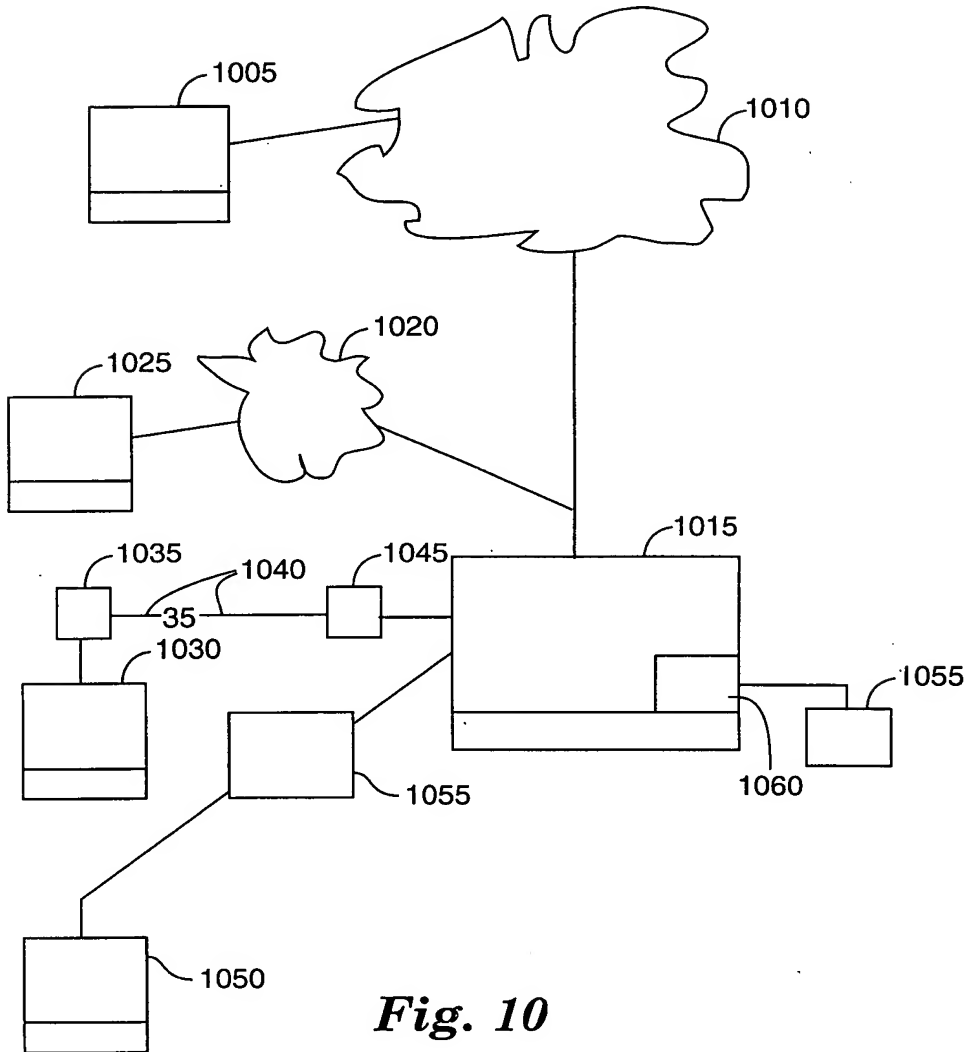


Fig. 10

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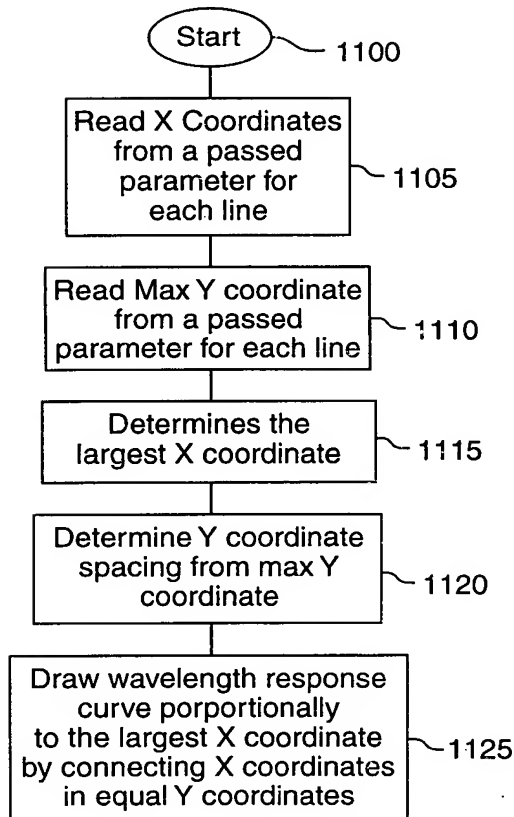


Fig. 11